LETTER REPORT
FOR
CHICAGO INDUSTRIAL WASTE HAULERS
ALSIP, COOK COUNTY, ILLINOIS
U.S. EPA ID: ILD981538689
SSID: FB
TDD: T05-9106-017
PAN: EIL0744RAA 8/28/91

AUGUST 28, 1991

Prepared by: Michelle L. Foster Date: 8/28/91
Reviewed by: David Sullivan for BRJ Date: 8/28/91
Approved by: Thomas A Adams Date: 8/28/91

ecology and environment, inc.
111 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60604, TEL. 312-663-9415
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International Specialists in the Environment

August 28, 1991

Mr. Duane Heaton, Deputy Project Officer
U.S. Environmental Protection Agency
Emergency Response Section
230 South Dearborn Street
12th Floor
Chicago, Illinois 60604

Re: Chicago Industrial Waste Haulers Site
Alsip, Illinois
TDD# T05-9106-017
PAN# EIL0744RAA

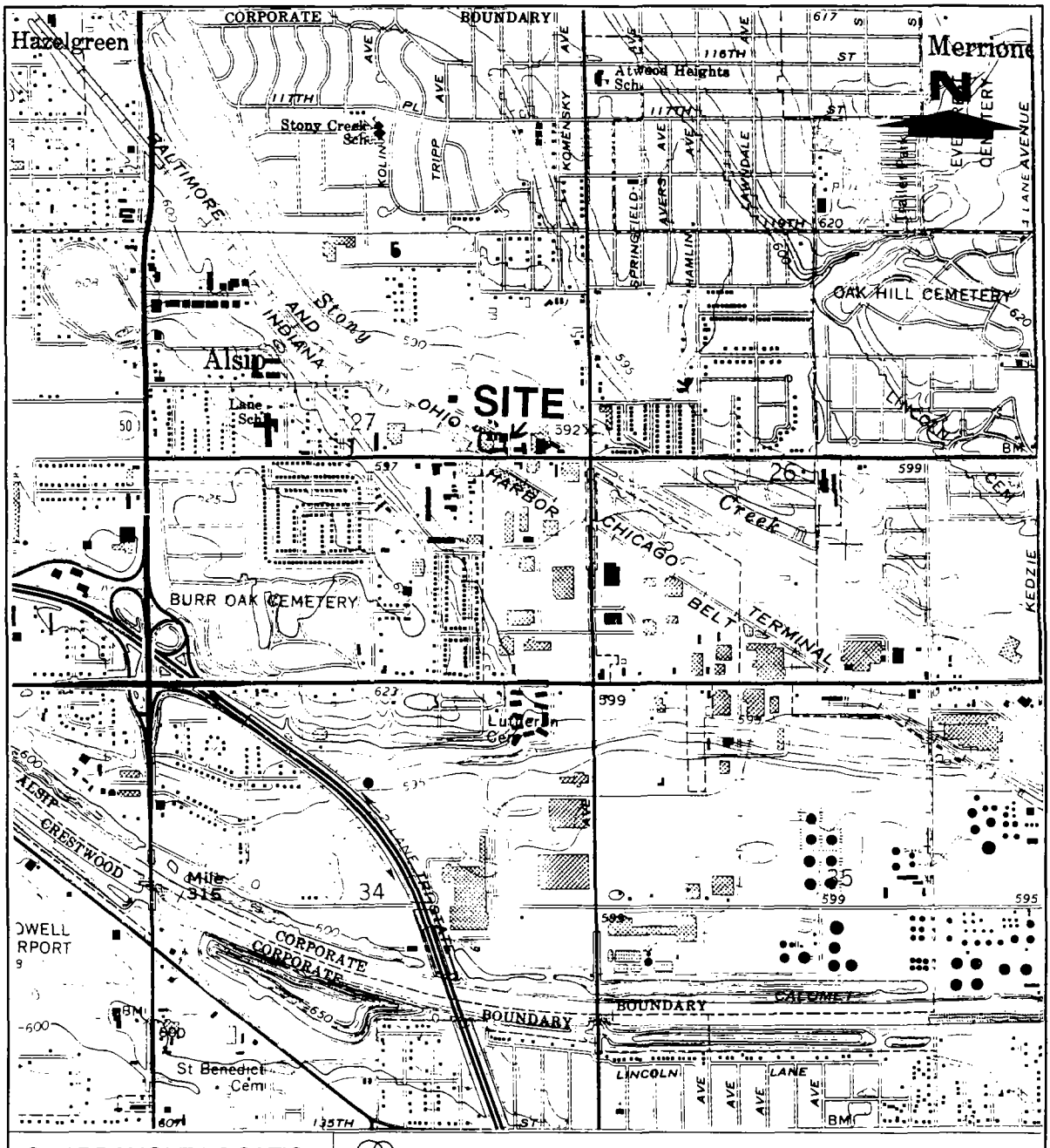
Dear Mr. Heaton:

The Ecology and Environment, Inc. (E & E) Technical Assistance Team (TAT) was tasked by the United States Environmental Protection Agency (U.S. EPA) under TDD# T05-9106-017 to provide technical support and confirmation sampling at the Chicago Industrial Waste Haulers site, Alsip, Cook County, Illinois (see Figure 1 for site location). TAT prepared a sampling plan and collected nine surface soil samples for polychlorinated biphenyl (PCB) analysis. In addition, sampling activities were photographed.

BACKGROUND

The Chicago Industrial Waste Haulers (CIWH) site is an abandoned waste oil storage facility covering approximately 6 acres of fenced land at 4206 Shirley Lane in Alsip, Illinois. The site is located in a mixed industrial and residential area and is completely fenced with the exception of a parcel of overgrown land northeast of the fenced lot (see Figure 2 for site features). A section of railroad tracks and a light metal manufacturing facility border the site on the southwest and the south, respectively. The east side of the site is bordered by Shirley Avenue and a trucking company and the north side by vacant land. A playground and a residential area lie approximately 200 feet north of the site on the other side of a small intermittent stream named Stoney Creek.

Operations began at the site around 1950 when Chicago Tank Cleaners, Inc. (CTC) utilized the property for the storage of waste materials derived during the cleaning of industrial petroleum tanks. CTC changed its name to CIWH in 1986 and began storing a variety of waste materials on-site including slop oil emulsion solids, waste oil-water mixtures, waste oil/solvent mix, ignitable hazardous waste materials, tank bottoms, number six oils, lube oils, and PCB-containing oils. The company discontinued operations at the site later that same year, and the site has remained inactive since. The site is currently under the control of Pollution Control Industries of America (PCIA). (Woodward-Clyde 1990)



QUADRANGLE LOCATION

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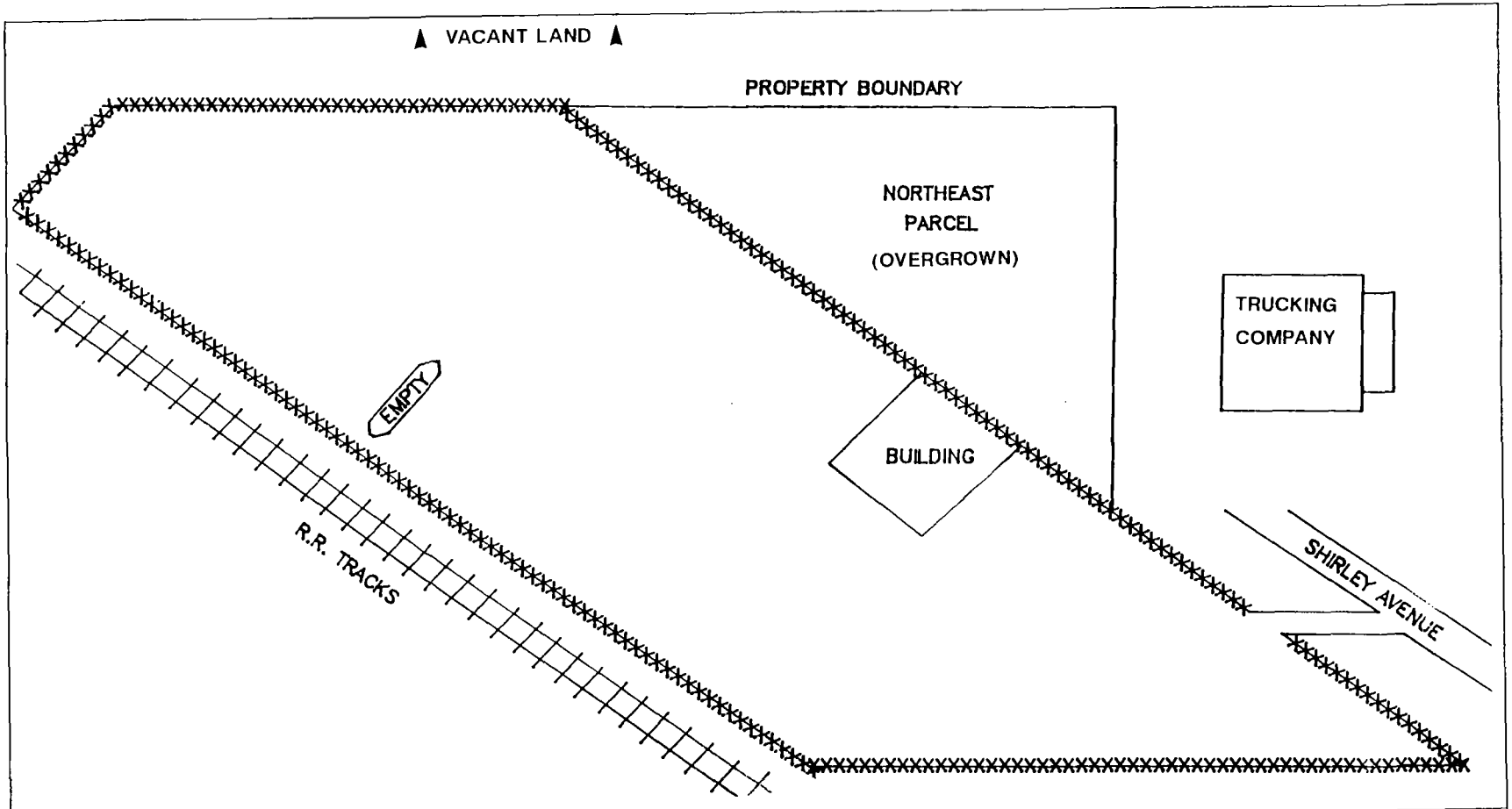
Region V

TITLE	FIGURE #
SITE LOCATION	1
SITE	**SCALE**
CHICAGO INDUSTRIAL WASTE HAULERS	1:24000
CITY / **STATE**	**PAN**
ALSIP / ILLINOIS	EIL0744RAA

SOURCE: USGS TOPOGRAPHIC MAP, BLUE ISLAND, IL QUADRANGLE, 1963, PHOTOREVISED 1973



LEGEND

N

xxxxxxxxx = FENCED AREA

= TRUCK TRAILER

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Region V

TITLE SITE FEATURES	FIGURE # 2
SITE CHICAGO INDUSTRIAL WASTE HAULERS	SCALE NOT TO SCALE
CITY ALSIP STATE ILLINOIS	PAN EIL0744RAA
SOURCE ON-SITE OBSERVATIONS	DATE 1991

A Spill Prevention Control and Countermeasure (SPCC) inspection at the CIWH site in early March 1989 first brought the site to the U.S. EPA's attention. A site assessment conducted later that month by the U.S. EPA and TAT documented the presence of 24 above-ground storage tanks with PCB and flammable labels and numerous unlabelled drums on-site. An U.S. EPA removal action completed in June 1989 consisted of the pumping and disposal of all the liquid hazardous wastes in the on-site storage tanks. (Woodward-Clyde 1990)

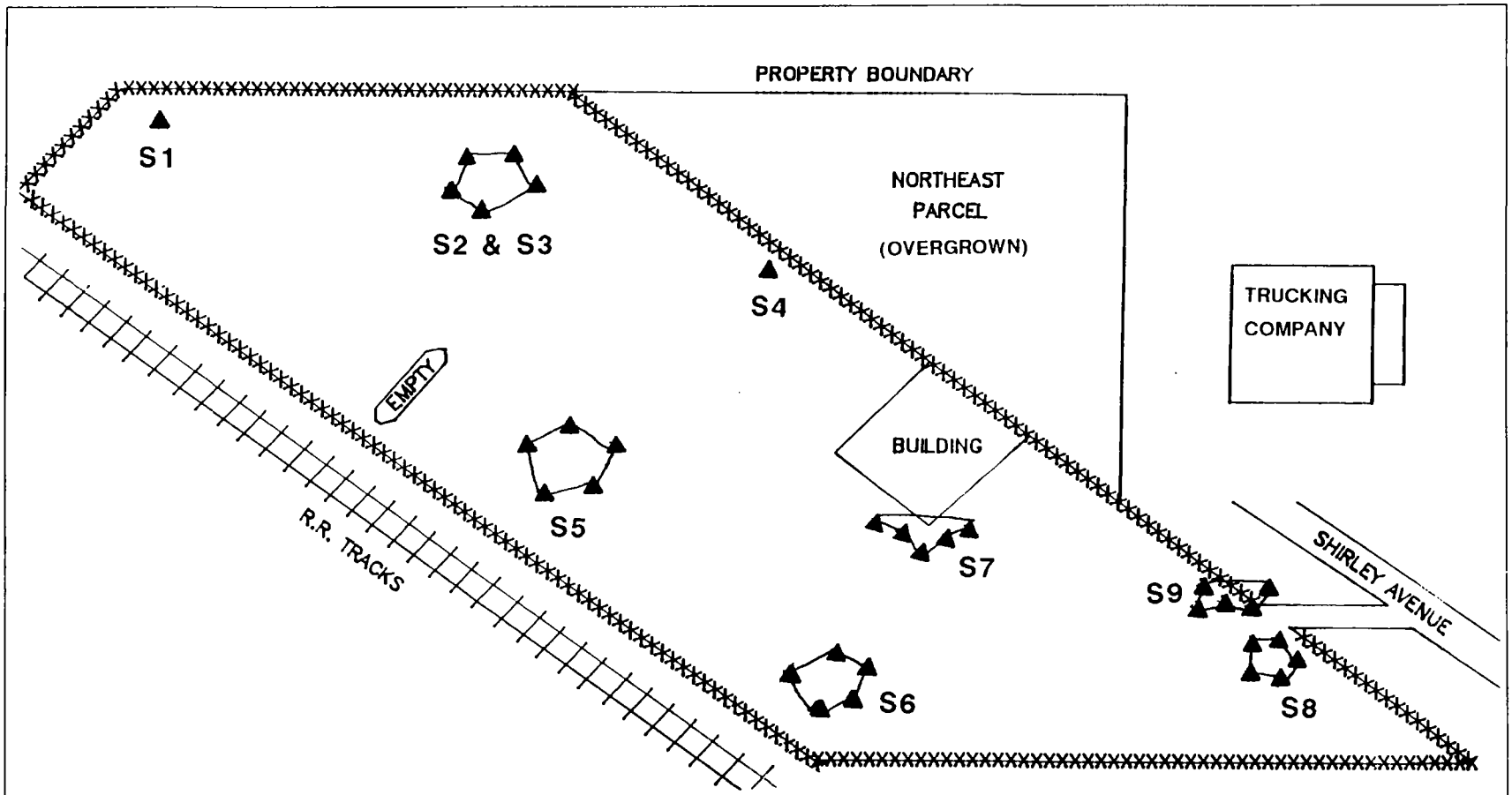
In April 1989, the U.S. EPA issued an unilateral Administrative Order (AO) to the site PRP requesting that PCIA assume responsibility for the remaining clean-up activities required at the site. In response to the AO, various wastes and waste storage vessels were shipped off-site for disposal during 1989 and 1990. In addition, the AO required that the extent of contamination in on-site soils be assessed in a comprehensive site investigation. PCIA arranged for various subcontractors to establish and layout a sampling grid consisting of 105 sampling points. In July 1990, surface samples were collected at each point on the grid and analyzed for PCBs. A total of 31 samples contained detectable concentrations of PCBs ranging from 1.2 ppm to 32 ppm. TAT was tasked to conduct confirmation sampling in an effort to verify the PCB concentrations in on-site surface soils reported by the PRP. (Woodward-Clyde 1990)

SITE ACTIVITIES

On Monday July 8, 1991, TAT members (TATms) Michelle Jaster and Bill Sass met OSC Len Zintak on-site at 1300 hours as previously arranged. Chuck Smith of PCIA was already present and prepared to collect duplicate samples.

After a brief discussion of the sampling plan proposed by TAT, sampling activities began at 1330 hours. See Figure 3 for sampling locations. TAT collected a total of 9 surface soil samples, including a duplicate, on-site. All sampling activities were conducted in Level C. All samples were collected using a stainless steel hand trowel. Sample material was excavated from a hole 3-6 inches deep and placed in a stainless steel bowl. The material was then mixed before being split with Smith of PCIA. Composite samples were prepared by mixing sample material from five different locations in the stainless steel bowl prior to the splitting of the samples. All sampling equipment was decontaminated in between sampling locations with an Alconox and distilled water solution and a triple rinse with distilled water.

Sampling activities were completed at 1500 hours. Smith (PCIA) left site at this time while TATms packaged samples for shipment to the laboratory. OSC Zintak and TATms left site at 1600 hours. Samples collected were analyzed by PCS Labs in LaOtto, Indiana for the following PCBs: Aroclor 1016, 1221, 1232, 1242, 1248, 1254 and 1260. Analytical results are presented in Table 1 and the laboratory data package can be found in Appendix B.



LEGEND

N

= SOIL SAMPLE

= COMPOSITE SOIL SAMPLE

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Region V

TITLE: SAMPLE LOCATIONS	FIGURE #: 3
SITE: CHICAGO INDUSTRIAL WASTE HAULERS	SCALE: NOT TO SCALE
CITY: ALSIP STATE: ILLINOIS	PAN: EIL0744RAA
SOURCE: ON-SITE OBSERVATIONS	DATE: 1991

TABLE 1
Polychlorinated Biphenyl Concentrations (mg/kg)
for Surface Soil Samples
Chicago Industrial Waste Haulers -- Alsip, Illinois

Sample ID	TYPE	Aroclor 1260	Aroclor 1248
S1	GRAB	0.79J	1.0U
S2	COMP	4.9	4.3
S3	COMP	3.5	2.6
S4	GRAB	29.0	50.0
S5	COMP	120.0	1.0U
S6	COMP	2.6	1.0U
S7	COMP	5.2	1.0U
S8	COMP	18.0	1.0U
S9	COMP	16.0	1.0U

Note: COMP = composite sample
All values reported in mg/kg

U = The material was analyzed for but was not detected. The associated numerical value is the sample quantitation limit.

J = The associated numerical value is an estimated quantity because the reported concentrations were less than the contract required detection limits or quality control criteria were not met.

SAMPLING RESULTS

Elevated levels of PCBs were detected in samples S4 and S5 (Table 1). Aroclor 1248 was detected at 50J ppm at sample location S4 in the northcentral portion of the site. Aroclor 1260 was detected at 120J ppm at sample location S5 in the southcentral portion of the site.

RECOMMENDATIONS

TAT recommends that some or all of the following measures be taken at the CIWH site in an effort to complete clean-up activities:

- Further sampling may be necessary in other areas on-site in order to ensure all contaminated areas have been located. A smaller scale grid similar to the one previously employed by the PRP's contractor may prove useful.

- Additional excavation and disposal of PCB-contaminated soil in the areas surrounding TAT-collected soil samples S4 and S5. The area composited for sample S5 should be closely examined due to the elevated level of Aroclor 1260 detected. Individual locations in this area may possibly contain even higher levels of PCBs.

- Confirmation sampling upon completion of additional soil excavation and disposal. An EPA recommended clean-up level for industrial areas of 25 ppm PCBs in soils is expected to be attained at all areas of the CIWH site.

Should you have any comments or questions, please feel free to contact this office.

Sincerely,

Michelle L. Jaster

Michelle L. Jaster

cc: Len Zintak, OSC, U.S. EPA
Lou Adams, TATL, E & E

Woodward-Clyde Consultants, 1990, Site Investigation and Characterization for the Chicago Industrial Waste Haulers Site, prepared for Pollution Control Industries of America.

APPENDIX A: SITE PHOTOGRAPHS

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Chicago Industrial Waste Haulers PAGE 1 OF 9

U.S. EPA ID: ILD981538689 TDD: T05-9106-017 PAN: EIL0744RAA

DATE: 7/08/91

TIME: 1335

DIRECTION OF PHOTOGRAPH: North

WEATHER CONDITIONS: Sunny and clear

Low 80's

PHOTOGRAPHED BY: Michelle Jaster

SAMPLE ID (if applicable): S1

DESCRIPTION: Close-up view of soil sample S1 location.

DATE: 7/08/91

TIME: 1335

DIRECTION OF PHOTOGRAPH: North

WEATHER CONDITIONS: Sunny and clear

Low 80's

PHOTOGRAPHED BY: Michelle Jaster

SAMPLE ID (if applicable): S1

DESCRIPTION: Perspective view of soil sample S1 location.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Chicago Industrial Waste Haulers PAGE 2 OF 9

U.S. EPA ID: ILD981538689 TDD: T05-9106-017 PAN: EIL0744RAA

DATE: 7/08/91

TIME: 1345

DIRECTION OF PHOTOGRAPH: Southeast

WEATHER CONDITIONS: Sunny and clear

Low 80's

PHOTOGRAPHED BY: Michelle Jaster

SAMPLE ID (if applicable): S2 & S3 (dup)

DESCRIPTION: Close-up view of soil samples S2 and S3 (duplicate) location.

DATE: 7/08/91

TIME: 1345

DIRECTION OF PHOTOGRAPH: Southeast

WEATHER CONDITIONS: Sunny and clear

Low 80's

PHOTOGRAPHED BY: Michelle Jaster

SAMPLE ID (if applicable): S2 & S3 (dup)

DESCRIPTION: Perspective view of soil samples S2 and S3 (duplicate) location.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Chicago Industrial Waste Haulers PAGE 3 OF 9

U.S. EPA ID: ILD981538689 TDD: T05-9106-017 PAN: EIL0744RAA

DATE: 7/08/91

TIME: 1400

DIRECTION OF PHOTOGRAPH: Southeast

WEATHER CONDITIONS: Sunny and clear

Low 80's

PHOTOGRAPHED BY: Michelle Jaster

SAMPLE ID (if applicable): S4

DESCRIPTION: Close-up view of soil sample S4 location.

DATE: 7/08/91

TIME: 1400

DIRECTION OF PHOTOGRAPH: Southeast

WEATHER CONDITIONS: Sunny and clear

Low 80's

PHOTOGRAPHED BY: Michelle Jaster

SAMPLE ID (if applicable): S4

DESCRIPTION: Perspective view of soil sample S4 location.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Chicago Industrial Waste Haulers PAGE 4 OF 9

U.S. EPA ID: ILD981538689 TDD: T05-9106-017 PAN: EIL0744RAA

DATE: 7/08/91

TIME: 1410

DIRECTION OF PHOTOGRAPH: Northwest

WEATHER CONDITIONS: Sunny and clear

Low 80's

PHOTOGRAPHED BY: Michelle Jaster

SAMPLE ID (if applicable): S5

DESCRIPTION: Close-up view of soil sample S5 location.

DATE: 7/08/91

TIME: 1410

DIRECTION OF PHOTOGRAPH: Northwest

WEATHER CONDITIONS: Sunny and clear

Low 80's

PHOTOGRAPHED BY: Michelle Jaster

SAMPLE ID (if applicable): S5

DESCRIPTION: Perspective view of soil sample S5 location.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Chicago Industrial Waste Haulers PAGE 5 OF 9

U.S. EPA ID: ILD981538689 TDD: T05-9106-017 PAN: EIL0744RAA

DATE: 7/08/91

TIME: 1420

DIRECTION OF PHOTOGRAPH: Southeast

WEATHER CONDITIONS: Sunny and clear

Low 80's

PHOTOGRAPHED BY: Michelle Jaster

SAMPLE ID (if applicable): S6

DESCRIPTION: Close-up view of soil sample S6 location.

DATE: 7/08/91

TIME: 1420

DIRECTION OF PHOTOGRAPH: Southeast

WEATHER CONDITIONS: Sunny and clear

Low 80's

PHOTOGRAPHED BY: Michelle Jaster

SAMPLE ID (if applicable): S6

DESCRIPTION: Perspective view of soil sample S6 location.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Chicago Industrial Waste Haulers PAGE 6 OF 9

U.S. EPA ID: ILD981538689 TDD: T05-9106-017 PAN: EIL0744RAA

DATE: 7/08/91

TIME: 1430

DIRECTION OF PHOTOGRAPH: Northeast

WEATHER CONDITIONS: Sunny and clear

Low 80's

PHOTOGRAPHED BY: Michelle Jaster

SAMPLE ID (if applicable): S7

DESCRIPTION: Close-up view of soil sample S7 location.

DATE: 7/08/91

TIME: 1430

DIRECTION OF PHOTOGRAPH: Northeast

WEATHER CONDITIONS: Sunny and clear

Low 80's

PHOTOGRAPHED BY: Michelle Jaster

SAMPLE ID (if applicable): S7

DESCRIPTION: Perspective view of soil sample S7 location.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Chicago Industrial Waste Haulers PAGE 7 OF 9

U.S. EPA ID: ILD981538689 TDD: T05-9106-017 PAN: EIL0744RAA

DATE: 7/08/91

TIME: 1440

DIRECTION OF PHOTOGRAPH: Northeast

WEATHER CONDITIONS: Sunny and clear

Low 80's

PHOTOGRAPHED BY: Michelle Jaster

SAMPLE ID (if applicable): S8

DESCRIPTION: Close-up view of soil sample S8 location.

DATE: 7/08/91

TIME: 1440

DIRECTION OF PHOTOGRAPH: Northeast

WEATHER CONDITIONS: Sunny and clear

Low 80's

PHOTOGRAPHED BY: Michelle Jaster

SAMPLE ID (if applicable): S8

DESCRIPTION: Perspective view of soil sample S8 location.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Chicago Industrial Waste Haulers PAGE 8 OF 9

U.S. EPA ID: ILD981538689 TDD: T05-9106-017 PAN: EIL0744RAA

DATE: 7/08/91

TIME: 1445

DIRECTION OF PHOTOGRAPH: Northeast

WEATHER CONDITIONS: Sunny and clear

Low 80's

PHOTOGRAPHED BY: Michelle Jaster

SAMPLE ID (if applicable): S9

DESCRIPTION: Close-up view of soil sample S9 location.

DATE: 7/08/91

TIME: 1445

DIRECTION OF PHOTOGRAPH: Northeast

WEATHER CONDITIONS: Sunny and clear

Low 80's

PHOTOGRAPHED BY: Michelle Jaster

SAMPLE ID (if applicable): S9

DESCRIPTION: Perspective view of soil sample S9 location.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Chicago Industrial Waste Haulers

U.S. EPA ID: ILD981538689

TDD: T05-9106-017

PAN: EIL0744RAA

DATE: 7/8/91 TIME: 1450 DIRECTION OF PHOTOGRAPH: NE PHOTOGRAPHED BY: Michelle Jaster

WEATHER CONDITIONS: Sunny and clear, Low 80's SAMPLE ID (if applicable): NA

DESCRIPTION: Perspective of northeastern section of site. Note location of on-site building and empty tank trailer in the background.

APPENDIX B: LABORATORY DATA PACKAGE

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M E M O R A N D U M

DATE: August 13, 1991

TO: Michelle Jaster, Project Manager, E & E, Chicago, IL

FROM: Brenda Jones, TAT-Chemist, E & E, Chicago, IL

SUBJ: **Pesticide/PCB Data Quality Assurance Review,** Chicago Industrial Waste Haulers Site

REF: Analytical TDD: T05-9106-806 Project TDD: T05-9106-017
Analytical PAN: EIL0744AAA Project PAN: EIL0744RAA

The data quality assurance review of nine soil samples collected from the Chicago Industrial Waste Haulers site in Alsip, Illinois has been completed. Analysis for PCBs (U.S. EPA method 8080) was performed by PCS Labs, LaOtto, Indiana.

The nine samples were numbered: S1 through S9

Data Qualifications:

I Holding Time: Acceptable
The samples were received on 7/9/91 after sampling on 7/8/91. They were analyzed on 7/10/91 which is within the allowable holding time of 14 days to extraction and 40 days from extraction to analysis.

II Instrument Performance: Acceptable
Based on a review of the chromatograms, there is adequate peak separation to accurately identify individual aroclors.

III Initial and Continuing Calibration Verification
A. Initial Calibration:
The lab performed an initial calibration using three standards. According to the CLP Statement of Work, the evaluation of the percent RSD is not applicable to multipeak compounds such as PCBs.

B. Continuing Calibration: Acceptable
The percent difference of the continuing calibration response factors from the initial average response factors are all less than the allowable limit of 10%.

IV Matrix Spike/Matrix Spike Duplicates:
The percent recoveries of the spikes are less than the acceptable 80% limit. Although they are considered estimated, these values are biased low, and at worst, underestimate the true values. Therefore, in the opinion of the reviewer, no action is necessary. The relative percent difference of the matrix spike and matrix spike duplicate is 9.0%, which is acceptable.

V Blanks: Acceptable
No compounds were detected in the blanks at levels above the detection limits.

VI Compound Identification: Data not available

VII Compound Quantitation and Reported Detection Limits: Data not available

VIII Performance Evaluation Samples: Not applicable

IX Surrogates:
Three of the surrogates are outside the acceptable limits. Since the guidance is not specific concerning surrogates, no action is taken by the reviewer.

X Overall Assessment of Data for Use

The overall usefulness of the data is based on the criteria outlined in "Quality Assurance/Quality Control Guidance for Removal Activities" (April 1990) and Contract Laboratory Program Statement of Work for Organic Analysis OLM01-0. Based upon the information provided, the data are acceptable for use with the above stated data qualifications.

Data Qualifiers and Definitions

J - The associated numerical value is an estimated quantity because the reported concentrations were less than the contract required detection limits or quality control criteria were not met.

U - The material was analyzed for but was not detected. The associated numerical value is the sample quantitation limit.

ECOLOGY AND ENVIRONMENTAL
CASE NARRATIVE

All samples were received and logged into the laboratory without incident. The samples were analyzed for polychlorinated biphenyls. Enclosed are the initial and continuing calibration data sheets.

The samples were analyzed first on a DB-608 column. PCB's were detected and confirmed by GC/MS. Samples S2, S3 and S4 contained mixtures of aroclors 1248 and 1260. These mixtures made quantitation difficult. Every effort was made to isolate peaks that were not common in either aroclors. Quantitation was based on the 5-6 most significant peaks rather than the total area allowing a more accurate quantitation of the two separate aroclors.

Samples S4, S5, S8 and S9 were diluted into range of the original calibration curve for more accurate results. All samples were spiked with the surrogate dibutylchlorendate. The samples S4, S5 and S8 had an interfering peak eluting at the same retention time as the surrogate. This resulted in high surrogate recovery values for these samples. These high recoveries are attributed to the matrix of the samples.

Sincerely,
POLLUTION CONTROL SYSTEMS INCORPORATED

Pamela L. Kelly
Organic Chemistry Supervisor

PLK/jaf
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EPA SAMPLE NO.

SVBLK01

PESTICIDE ORGANICS ANALYSIS DATA SHEET

LAB NAME: POLLUTION CONTROL SYSTEMS INCORPORATED

MATRIX: (SOIL/WATER) SOIL — LAB SAMPLE ID: LAB BLANK

SAMPLE WT/VOL: 2.85 (g/ml) GM — LAB FILE ID: 0709PCB061F0305.D

LEVEL: (LOW/MED) MED — DATE RECEIVED: 7/9/91

DATE EXTRACTED: 7/9/91 — DATE ANALYZED: 7/11/91

EXTRACTION: (SEPF/CONT/SONC) SONC — DILUTION FACTOR: 1

GPC CLEANUP (Y/N): N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L or UG/KG) UG/KG	Q
12674-11-2	Aroclor-1016	1000	U
11104-28-2	Aroclor-1221	1000	U
11141-16-5	Aroclor-1232	1000	U
53469-21-9	Aroclor 1242	1000	U
12672-29-6	Aroclor 1248	1000	U
11097-69-1	Aroclor-1254	1000	U
11096-82-5	Aroclor-1260	1000	U

JAF\JAN91\SUBLK01

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EPA SAMPLE NO.

PESTICIDE ORGANICS ANALYSIS DATA SHEET

ECOLOGY & ENV.
S1, SOIL 1

LAB NAME: POLLUTION CONTROL SYSTEMS INCORPORATED

MATRIX: (SOIL/WATER) SOIL LAB SAMPLE ID: 7480

SAMPLE WT/VOL: 2.76 (g/ml) GM LAB FILE ID: 0709PCB027F0201.D

LEVEL: (LOW/MED) MED DATE RECEIVED: 7/9/91

DATE EXTRACTED: 7/9/91 DATE ANALYZED: 7/10/91

EXTRACTION: (SEPF/CONT/SONC) SONC DILUTION FACTOR: 1

GPC CLEANUP (Y/N): N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/l or ug/kg) UG/KG	Q
12674-11-2	Aroclor-1016	1000	U
11104-28-2	Aroclor-1221	1000	U
11141-16-5	Aroclor-1232	1000	U
53469-21-9	Aroclor 1242	1000	U
12672-29-6	Aroclor 1248	1000	U
11097-69-1	Aroclor-1254	1000	U
11096-82-5	Aroclor-1260	790	J

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EPA SAMPLE NO.

PESTICIDE ORGANICS ANALYSIS DATA SHEET

ECOLOGY & ENV. SOIL 1, S1 MS

LAB NAME: POLLUTION CONTROL SYSTEMS INCORPORATED

MATRIX: (SOIL/WATER) SOIL — LAB SAMPLE ID: 7480 MS

SAMPLE WT/VOL: 2.89 (g/ml) GM — LAB FILE ID: 0709PCB058F0201.D

LEVEL: (LOW/MED) MED — DATE RECEIVED: 7/9/91

DATE EXTRACTED: 7/9/91 — DATE ANALYZED: 7/10/91

EXTRACTION: (SEPF/CONT/SONC) SONC — DILUTION FACTOR: 1

GPC CLEANUP (Y/N): N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L or UG/KG) UG/KG	Q
12674-11-2	Aroclor-1016	1000	U
11104-28-2	Aroclor-1221	1000	U
11141-16-5	Aroclor-1232	1000	U
53469-21-9	Aroclor 1242	1000	U
12672-29-6	Aroclor 1248	1000	U
11097-69-1	Aroclor-1254	1000	
11096-82-5	Aroclor-1260	1300	

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EPA SAMPLE NO.

PESTICIDE ORGANICS ANALYSIS DATA SHEET

ECOLOGY & ENV.
SOIL 1, S1 MSD

LAB NAME: POLLUTION CONTROL SYSTEMS INCORPORATED

MATRIX: (SOIL/WATER) SOIL LAB SAMPLE ID: 7480 MSD

SAMPLE WT/VOL: 3.01 (g/ml) GM LAB FILE ID: 0709PCB059F0201.D

LEVEL: (LOW/MED) MED DATE RECEIVED: 7/9/91

DATE EXTRACTED: 7/9/91 DATE ANALYZED: 7/10/91

EXTRACTION: (SEPF/CONT/SONC) SONC DILUTION FACTOR: 1

GPC CLEANUP (Y/N): N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L or UG/KG) UG/KG	Q
12674-11-2	Aroclor-1016	1000	U
11104-28-2	Aroclor-1221	1000	U
11141-16-5	Aroclor-1232	1000	U
53469-21-9	Aroclor 1242	1000	U
12672-29-6	Aroclor 1248	1000	U
11097-69-1	Aroclor-1254	900	
11096-82-5	Aroclor-1260	1400	

8/13/91

FORM I PEST 1/87 Rev.

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
Ecology & Env.
S2, Soil 2

LAB NAME: POLLUTION CONTROL SYSTEMS INCORPORATED

MATRIX: (SOIL/WATER) SOIL LAB SAMPLE ID: 7481

SAMPLE WT/VOL: 2.72 (g/ml) GM LAB FILE ID: 0709PCB046F0201.D

LEVEL: (LOW/MED) MED DATE RECEIVED: 7/9/91

DATE EXTRACTED: 7/9/91 DATE ANALYZED: 7/10/91

EXTRACTION: (SEPF/CONT/SONC) SONC DILUTION FACTOR: 1

GPC CLEANUP (Y/N): N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L OR UG/KG) UG/KG	Q
12674-11-2	Aroclor-1016	1000	U
11104-28-2	Aroclor-1221	1000	U
11141-16-5	Aroclor-1232	1000	U
53469-21-9	Aroclor 1242	1000	U
12672-29-6	Aroclor 1248	4300	
11097-69-1	Aroclor-1254	1000	U
11096-82-5	Aroclor-1260	4900	

BJ 4/15/91

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
ECOLOGY & ENV.
S3, SOIL 3

LAB NAME: POLLUTION CONTROL SYSTEMS INCORPORATED

MATRIX: (SOIL/WATER) SOIL — LAB SAMPLE ID: 7482

SAMPLE WT/VOL: 3.16 (g/ml) GM — LAB FILE ID: 0709PCB047F0201.D

LEVEL: (LOW/MED) MED — DATE RECEIVED: 7/9/91

DATE EXTRACTED: 7/9/91 — DATE ANALYZED: 7/10/91

EXTRACTION: (SEPF/CONT/SONC) SONC — DILUTION FACTOR: 1

GPC CLEANUP (Y/N): N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/l or ug/kg) UG/KG	Q
12674-11-2	Aroclor-1016	1000	U
11104-28-2	Aroclor-1221	1000	U
11141-16-5	Aroclor-1232	1000	U
53469-21-9	Aroclor 1242	1000	U
12672-29-6	Aroclor 1248	2600	
11097-69-1	Aroclor-1254	1000	U
11096-82-5	Aroclor-1260	3500	

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1D

EPA SAMPLE NO.

ECOLOGY & ENV. S4, SOIL 4

PESTICIDE ORGANICS ANALYSIS DATA SHEET

LAB NAME: POLLUTION CONTROL SYSTEMS INCORPORATED

MATRIX: (SOIL/WATER) SOIL — LAB SAMPLE ID: 7483

SAMPLE WT/VOL: 2.85 (g/ml) GM — LAB FILE ID: 0709PCB048F0201.D

LEVEL: (LOW/MED) MED — DATE RECEIVED: 7/9/91

DATE EXTRACTED: 7/9/91 — DATE ANALYZED: 7/10/91

EXTRACTION: (SEPF/CONT/SONC) SONC — DILUTION FACTOR: 10

GPC CLEANUP (Y/N): N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L or UG/KG) UG/KG	Q
12674-11-2	Aroclor-1016	1000	U
11104-28-2	Aroclor-1221	1000	U
11141-16-5	Aroclor-1232	1000	U
53469-21-9	Aroclor 1242	1000	U
12672-29-6	Aroclor 1248	50,000	
11097-69-1	Aroclor-1254	1000	U
11096-82-5	Aroclor-1260	29,000	

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EPA SAMPLE NO.

PESTICIDE ORGANICS ANALYSIS DATA SHEET

ECOLOGY & ENV.
S5, SOIL 5

LAB NAME: POLLUTION CONTROL SYSTEMS INCORPORATED

MATRIX: (SOIL/WATER) SOIL LAB SAMPLE ID: 7484

SAMPLE WT/VOL: 3.03 (g/ml) GM LAB FILE ID: 0709PCB062F0304.D

LEVEL: (LOW/MED) MED DATE RECEIVED: 7/9/91

DATE EXTRACTED: 7/9/91 DATE ANALYZED: 7/11/91

EXTRACTION: (SEPF/CONT/SONC) SONC DILUTION FACTOR: 20

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L or UG/KG) UG/KG	Q
12674-11-2	Aroclor-1016	1000	U
11104-28-2	Aroclor-1221	1000	U
11141-16-5	Aroclor-1232	1000	U
53469-21-9	Aroclor 1242	1000	U
12672-29-6	Aroclor 1248	1000	U
11097-69-1	Aroclor-1254	1000	U
11096-82-5	Aroclor-1260	120,000	

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EPA SAMPLE NO.

PESTICIDE ORGANICS ANALYSIS DATA SHEET

ECOLOGY & ENV.
S6, SOIL 6

LAB NAME: POLLUTION CONTROL SYSTEMS INCORPORATED

MATRIX: (SOIL/WATER) SOIL LAB SAMPLE ID: 7485

SAMPLE WT/VOL: 2.87 (g/ml) GM LAB FILE ID: 0709PCB035F0201.D

LEVEL: (LOW/MED) MED DATE RECEIVED: 7/9/91

DATE EXTRACTED: 7/9/91 DATE ANALYZED: 7/10/91

EXTRACTION: (SEPF/CONT/SONC) SONC DILUTION FACTOR: 1

GPC CLEANUP (Y/N): N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/l or ug/kg) UG/KG	Q
12674-11-2	Aroclor-1016	1000	U
11104-28-2	Aroclor-1221	1000	U
11141-16-5	Aroclor-1232	1000	U
53469-21-9	Aroclor 1242	1000	U
12672-29-6	Aroclor 1248	1000	U
11097-69-1	Aroclor-1254	1000	U
11096-82-5	Aroclor-1260	2600	

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
ECOLOGY & ENV. S7, SOIL 7

LAB NAME: POLLUTION CONTROL SYSTEMS INCORPORATED

MATRIX: (SOIL/WATER) SOIL — LAB SAMPLE ID: 7486

SAMPLE WT/VOL: 2.56 (g/ml) GM — LAB FILE ID: 0709PCB036F0201.D

LEVEL: (LOW/MED) MED — DATE RECEIVED: 7/9/91

DATE EXTRACTED: 7/9/91 — DATE ANALYZED: 7/10/91

EXTRACTION: (SEPF/CONT/SONC) SONC — DILUTION FACTOR: 10

GPC CLEANUP (Y/N): N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/l or ug/kg) UG/KG	Q
12674-11-2	Aroclor-1016	1000	U
11104-28-2	Aroclor-1221	1000	U
11141-16-5	Aroclor-1232	1000	U
53469-21-9	Aroclor 1242	1000	U
12672-29-6	Aroclor 1248	1000	U
11097-69-1	Aroclor-1254	1000	U
11096-82-5	Aroclor-1260	5200	

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
ECOLOGY & ENV.
S8, SOIL 8

LAB NAME: POLLUTION CONTROL SYSTEMS INCORPORATED

MATRIX: (SOIL/WATER) SOIL — LAB SAMPLE ID: 7487

SAMPLE WT/VOL: 2.82 (g/ml) GM — LAB FILE ID: 0709PCB050F0201.D

LEVEL: (LOW/MED) MED — DATE RECEIVED: 7/9/91

DATE EXTRACTED: 7/9/91 — DATE ANALYZED: 7/10/91

EXTRACTION: (SEPF/CONT/SONC) SONC — DILUTION FACTOR: 10

GPC CLEANUP (Y/N): N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/l or ug/kg) UG/KG	Q
12674-11-2	Aroclor-1016	1000	U
11104-28-2	Aroclor-1221	1000	U
11141-16-5	Aroclor-1232	1000	U
53469-21-9	Aroclor 1242	1000	U
12672-29-6	Aroclor 1248	1000	U
11097-69-1	Aroclor-1254	1000	U
11096-82-5	Aroclor-1260	18,000	

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
ECOLOGY & ENV.
S9, SOIL 9

LAB NAME: POLLUTION CONTROL SYSTEMS INCORPORATED

MATRIX: (SOIL/WATER) SOIL — LAB SAMPLE ID: 7488

SAMPLE WT/VOL: 2.21 (g/ml) GM — LAB FILE ID: 0709PCB053F0201.D

LEVEL: (LOW/MED) MED — DATE RECEIVED: 7/9/91

DATE EXTRACTED: 7/9/91 — DATE ANALYZED: 7/10/91

EXTRACTION: (SEPF/CONT/SONC) SONC — DILUTION FACTOR: 10

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/l or ug/kg) UG/KG	Q
12674-11-2	Aroclor-1016	1000	U
11104-28-2	Aroclor-1221	1000	U
11141-16-5	Aroclor-1232	1000	U
53469-21-9	Aroclor 1242	1000	U
12672-29-6	Aroclor 1248	1000	U
11097-69-1	Aroclor-1254	1000	U
11096-82-5	Aroclor-1260	16,000	

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